

REMARKS

Reconsideration of the instant application is respectfully requested in view of the amendments above and the following remarks. No amendments to the claims have been made. The specification is amended to perfect the claim of priority. The petition for perfecting the claim of priority is submitted with this Response.

A. Examiner's comments regarding Response to Restriction/Election Requirement

Applicants respectfully disagree with the Examiner's misinterpretation of Applicant's response, namely, with the Examiner's conclusion that SEQ ID NOs 1-8 are obvious over each other. See *Office Action* at 2.

The fact that two sequences share certain functional and structural characteristics does not make them obvious over each other. The test of obviousness of the species recited in the Markush claim is articulated in MPEP § 803.02, which states that

[a] Markush-type claim may include independent and distinct inventions. This is true where two or more of the members are so unrelated and diverse that a prior art reference anticipating the claim with respect to one of the members would not render the claim obvious under 35 U.S.C. 103 with respect to the other member(s).

In the instant case, fragments of LMP-1 or LMP-3 proteins are not obvious over the prior art references cited by the Examiner. For example, how would one of skill in the art know or guess SEQ ID NO: 7 armed only with the knowledge of LMP-1 sequence disclosed, e.g., in Hair? Accordingly, Applicants respectfully maintain that sequences recited, e.g, in claim 34 are not obvious over each other.

B. Rejections based on 35 U.S.C § 103

With respect to rejections based on Hair (U.S. Patent 6,300,123) and Boden (Endocrinology 1998, 139(12): 5125-5134), Applicants respectfully note that the specification of the instant application has been amended to perfect the priority of the instant application. As a result, Boden and Hair cited by the Examiner, are not proper prior art references. For these reasons, Applicants respectfully request the Examiner to withdraw these grounds for rejection.

C. Double Patenting Rejections.

The Examiner rejected the claims of the instant application under the obviousness-type double patenting doctrine as unpatentable in view of a combination of Nagahara and either U.S. Patent 6,858,431 or U.S. Patent 6,521,750. Applicants respectfully request that these rejection be held in abeyance until all other rejection grounds are removed.

D. Miscellaneous

Applicants submit a list of co-pending applications and issued patents assigned to the assignee of the instant application. This list is attached hereto as Exhibit A.

Submission of this list should not be construed as an admission that the claims of the instant application and the claims of the applications or patent listed in Attachment A are co-extensive or obvious over each other.

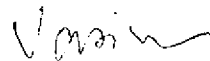
CONCLUSION

Applicants believe that they have fully responded to the Examiner's concerns, and the claims of the instant application are in condition for allowance. Applicants request that any questions concerning this matter be directed to the undersigned at (609) 844-3021.

Please charge any deficiency and/or credit any overpayment to Deposit Account No. 50-1943. Thank you for your kind consideration in this matter.

Respectfully submitted,

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EXHIBIT A

PAT. NO.	Title
1 7,252,685	Fusion implant and method of making same
2 7,172,629	Osteogenic paste compositions and uses thereof
3 7,045,614	LIM mineralization protein splice variants
4 7,045,125	Biologically active composites and methods for their production and use
5 7,018,415	Expandable spinal fusion device and methods of promoting spinal fusion
6 6,890,728	Methods of isolating blood components using a microcentrifuge and uses thereof
7 6,858,431	Bone mineralization proteins, DNA, vectors expression systems
8 6,521,750	Bone mineralization proteins, DNA, vectors, expression systems
9 6,444,803	Bone mineralization proteins, DNA, vectors, expression systems
10 6,300,127	Bone mineralization proteins, DNA, vectors, expression systems

PUB. APP. NO.	APP. SERIAL NO.	PUB. APP. NO.	
1 20070276489	11/835,091		Fusion implant and method of making same
2 20070259030	11/418,948		Methods, systems and reagents for tendon and ligament therapy
3 20070243228	11/403,733		Drug depot implant designs and methods of implantation
4 20070243225	11/734,618		Drug depot implant designs and methods of implantation
5 20070191591	11/633,963		Smurf1 independent mechanism of osteoinduction of LMP-3 protein
6 20070190572	11/607,348		Methods and kits using a molecular interaction between a Smurf-1 WW domain and LIM mineralization protein isoforms
7 20070134218	11/602,805		Methods of inducing or increasing the expression of proteoglycans such as aggrecan in cells
8 20070128249	11/670,804		Osteogenic paste compositions and uses thereof
9 20070116689	11/433,059		LIM mineralization protein splice variants
10 20070099176	11/545,349		Methods of expressing LIM mineralization protein
11 20070027081	11/385,612		Mechanisms of osteoinduction by LIM mineralization protein-1 (LMP-1)
12 20070009493	11/443,387		Chondrogenic compositions and methods of use
13 20060293757	11/158,924		Osteograft treatment to promote osteoinduction and osteograft incorporation
14 20060259006	11/118,125		Devices and methods for delivering medical agents

- 15 20060149385 11/332,959 Expandable spinal fusion device and methods of promoting spinal fusion
- 16 20060046961 11/091,348 Controlled and directed local delivery of anti-inflammatory compositions
- 17 20060046960 10/932,878 Controlled and directed local delivery of anti-inflammatory compositions
- 18 20060019392 10/951,236 Novel bone mineralization proteins, DNA, vectors, expression systems
- 19 20050130301 10/887,275 Isolation of bone marrow fraction rich in connective tissue growth components and the use thereof to promote connective tissue formation
- 20 20040249471 10/455,760 Fusion implant and method of making same
- 21 20040197867 10/806,915 Intracellular delivery of osteoinductive proteins and peptides
- 22 20040064058 10/399,836 Methods and instruments for treating pseudoarthrosis
- 23 20040034428 10/399,830 Spinal fusion methods and devices
- 24 20040002558 09/923,117 Osteogenic paste compositions and uses thereof
- 25 20030225021 10/382,844 Methods of inducing the expression of bone morphogenetic proteins (BMPs) and transforming growth factor-beta proteins (TGF-betas) in cells
- 26 20030180266 10/292,951 Methods of expressing LIM mineralization protein in non-osseous cells
- 27 20030125248 09/986,625 Novel bone mineralization proteins, DNA, vectors expression systems
- 28 20020182664 10/116,729 Methods of isolating blood components using a microcentrifuge and uses thereof
- 29 20020127720 10/035,797 Biologically active composites and methods for their production and use
- 30 20020086987 09/986,621 Novel bone mineralization proteins, DNA, vectors, expression systems
- 31 20020082694 09/923,116 Highly-mineralized osteogenic sponge compositions, and uses thereof